

European Corn Borer on Corn

The European corn borer has become a major insect pest of corn wherever it has become established. Unfortunately, this pest has become established throughout most of South Carolina within the last several years. Although it is not yet the most important insect pest of corn in this state, it does have that potential, and should be watched carefully.

Usually, the first sign of corn borer injury will be broken tassels caused by feeding in the tassels. Frass will be pushed out of the burrows and will collect at the base of the leaves. Later in the season, this may be seen anywhere on the stalk. The greatest damage is caused when feeding in the stalk causes the stalk to weaken and break, or when feeding at the point of ear attachment causes the ears to break off. In either case, many ears may be missed by the picker.



European corn larva (left) and adult moths (right) showing color phases.

Photos: Clemson University CE Series, CE 2023 (left), CE 1331B (right).

There may be three to four generations of European corn borers per year in South Carolina. The moths lay eggs in groups on corn leaves. As these hatch, young larvae first feed on the foliage, then bore into the stalks. Overwintering takes place within the stalks as full-grown larvae. Pupation occurs in burrows in the stalk, followed by adult emergence. Ordinary plowing is of little

value against this pest, since the stalks may remain above or near the soil surface.

Insecticides are also of limited value, since the pest is protected within the stalk beneath a plug of frass. The most effective control known for this pest is **clean** plowing-under of the stalks. This is done by using wide-bottom plows with wires attached such that the stalks are pulled clear below the soil surface. When this is done, the emerging moths are unable to reach the surface. Planting early may also be of use in minimizing the effects of this pest.

Although control of the European corn borer is difficult with insecticides, use of a recommended granular insecticide, by air or by high-clearance sprayer, just after larvae have hatched from the egg, may give adequate control. Proper timing is essential. Since the list of labeled products is constantly changing, and since available products varies from state to state, there will be no mention of specific products. With all insecticides, read and follow label instructions carefully.

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